SEEING THE WESTERN FARMS.

The Progressive Farmer's Washington Correspondent Takes a Trip to the Great Plains.

Editor of The Progressive Farmer:

Leaving Washington for a trip through Colorado, my first day of travel was one of indolent ease and rest, lolling in an observation car, as the train sped past the beautiful mountain scenery of West Virginia, with the forest cover changing from green to mottlings of brown, yellow and red, here and there reflected in broad reaches of the rivers and streams. At other times the latter ran brawling by, turbulent and foam-flecked. In the New River canyon, the mountain sides are almost percipitate, with occasional bad rocks and sheer cliffs, pushing through the tree growth; yet even on these steep slopes are occasional cabins with little cultivated patches of corn and grass, the yields apparently barely worth the harvesting. The mountains would support goats, but nothing else.

What a contrast is this to the broad rolling Iowa farms, seen a couple of days later! The central Iowa corn belt promises an exceptional yield, for the summer's moisture has been plenty and the soil is deep and black, but the wet weather of the last week has hurt much of the grain in the shock and it will not be marketable as bright corn. This will result in more than usual being stock-fed on the farms. I could not but contrast the lavish waste of fodder in Illinois, Iowa, and Eastern Nebraska—miles and miles and miles of it—with the "Eastern Shore" (Maryland) foddering, where every blade is carefully saved. But the Western farm stock is fine; splendid cattle and strong, glorious farm horses.

Now we are in Western Kansas, a limitless flat, covered with short grass and dotted with bands of grazing cattle. The rainfall is scant here and farming is impossible. Occasionally are seen patches of kaffir corn, which will make a fair crop where corn will fail. A snow storm has come up contrasting the horizon and whitening the prairie. During exceptionally wet years there is enough moisture to raise a good crop, as the soil is rich and needs only water, and in the '80's a succession of these good seasons induced people to swarm out over Western Kansas. Thousands of farms were staked out, and towns rose with churches, school-houses, and banks. But these have long since been deserted, and here and there an abandoned brick building, and other less substantial ruins, rise out of the prairie as testimonials to the soil's necessity for water.

The next step westward on the nation's checkerboard will be the arid region with its artificial watering pots, and abundant yields.

The Nebraska corn fields are yielding from sixty to ninety bushels to the acre. A 300,000,000 bushels crop or thereabouts is predicted for the State.

GUY E. MITCHELL.

The Influence of Height of Wheels on the Draft of Farm Wagons.

The Missouri Experiment Station has been conducting a series of experiments to determine the influence of the height of wheels on the draft of farm wagons and gives the following as a summary of the result:

1. For the same load, wagons with wheels of standard height drew lighter than those with lower whels.

2. The difference in favor of the standard wheels was greater on road surfaces in bad condition than on good road surfaces.

3. Low wheels cut deeper ruts than those of standard height.

4. The vibration of the tongue is greater in wagons with low whels.

5. For most purposes wagons with low wheels are more convenient than those of standard height.

6. Wagons with broad tires and wheels of standard height are cumbersome and require much room in turning.

7. Diminishing the height of wheel to from 30 to 36 inches in front and 40 to 44 inches in the rear did not increase the draft in as great proportion as it increased the convenience of loading and unloading the ordinary farm freight.

8. Diminishing the height of wheels below 30 inches front and 40 inches rear, increased the draft in greater proportion than it gained in convenience.

9. On good roads, increasing the length of rear axle so that the front and rear wheels will run in different tracks to avoid cutting ruts, did not increase the draft.

10. On sod, cultivated ground and bad roads, wagons with the rear axle longer than the front one, drew heavier than wagons having both axles of the same length.

11. Wagons with the rear axle longer than the front one require wider gateways and more careful drivers and are on the whole very inconvenient and not to be recommended for farm use.

12. The best form of farm wagon is one with axles of equal length, broad tires and wheels 30 to 36 inches high in front and 40 to 44 inches behind.

The gross return on investments made in farm property in Virginia amounts to 22 per cent, and in North Carolina to 33 per cent. These returns compare very favorably with the gross returns made on investments in like property in Northern and Western States. In New York, the gross return is 17 per cent; in Pennsylvania, 14 per cent; in Illinois, 13 per cent; in Indiana, 15 per cent. The total area of Virginia farms is 19,907,805 acres, of which 10,094,805 are improved. The total area of North Carolina farms is 22,749,356 acres, of which only 8,327,106 are improved. The total amount paid for labor on Virginia farms in 1899 was $7,790,720, and on North Carolina farms, $5,185,167. The amount paid for fertilizers in Virginia in 1899, was $3,681,790, and in North Carolina, $4,479,030.—Southern Planter.

PROPAGATING SCUPPERNONG GRAPES.

There are Three Ways, Says Jack Johnson, and He Tells What they Are.

Editor of The Progressive Farmer:

In a recent number of The Progressive Farmer, our Professor of Horticuluture tells us how to propagate Scuppernong grapes; says he knows a man who grafts them on Bullace grape roots, which he says is of the same family. Now, I am sure there is not a man in North Carolina that knows better than our worthy Professor of Horticulture that propagation of this sort will not produce pure Scuppernong grapes. No cross-breeding, either in the animal or vegetable kingdom, will produce pure breeds, though they be of the same family. This is clearly demonstrated in the human family or the animal family. Take the horse and the ass and the cross-breeding either way will not produce a horse. The English and Muscovy ducks belong to the same family, but a cross will produce a duck differing from either, and a cross between a turkey and a peafowl makes a bird that it has not entered the mind of man to tell what it is.

Returning to the vegetable kingdom, a very sweet apple grafted in the stump of a sour one makes an apple different from either. Any one familiar with cleft-grafting knows that you can continue to graft in and on the same tree from the same stock and produce any number of different kinds of apples.

The same is true of grapes. There are but three ways known by which Scuppernong grapes can be propagated and preserve their purity. One is to buy cuttings. The cuttings should be of the last year's growth set in soft, moist, deep soil, and only one in twenty of these can be depended upon to live. Second, the bedding system. Clean up thoroughly under the vine, take away the support, and throw the vines down flat on the ground. Haul dirt from a neighboring hill and cover ten inches deep. This vine readily takes root and sends up a great number of scions. In December, after the leaves fall, dig up, take these scions, with sufficient vine and root, and set them out. Third, secure a quart of seed from the best vine you have. Plant these in a trench beside a wire fence in a row 100 feet long. When they come up, chop to one foot apart and cultivate first year. Let them run up the wire fence the second year they will bear. You will have in this row 99 vines and as many different kinds of grapes. Some of these will be of the finest sort. Some will be white; most of them will be purple. Save from the white ones. These have greater vitality than those grown from the old vine, perhaps many hundred years old. Vines rooted and removed only a few feet from the parent vine will bring grapes different in size and flavor from those produced by the mother.

I set nine in rows 40 feet each way, with a tree top for them to run upon as soon as large enough. Scaffold up with locust posts and cypress rails for bearings. Manure with barn manure and cultivate till they are 20 feet broad. Then cover the whole ground three or four inches deep with woodpile chips, sawdust or shavings. This will consume moisture and prevent any further trouble from weeds. Spray with Bordeaux mixture just before vegetation starts and just after the bloom falls, and you have it.

JACK JOHNSON.

Perquimans Co., N. C.

How to Make Bushel Crates.

Editor of The Progressive Farmer:

The standard United States bushel is the Winchester bushel of England—a circular measure 18½ inches in diameter by 8 inches deep, and contains 2,150 and 2-5 cubic inches. It equals 77 5-8 pounds of water at maximum density. The heaped bushel is the Winchester bushel heaped from outside of measure in a cone 6 inches high at the center and contains 2,748 cubic inches, nearly, or one bushel, one peck and about 1¾ pints. Ordinarily five pecks is reckoned a bushel in measuring coarse products like ear corn, potatoes, etc. But the statutory laws of different States, and the common law customs also, differ as to weight and capacity of a bushel of different products. Look up your local laws.

There are many patterns and capacities of bushel crates I have seen—also all sorts of materials. Some make them 14x18 inches with 12-inch corner posts, slats ⅜ inch thick by 2¼ inch wide, posts 1 inch square. Some have two-inch plank sawed out and then resawed ⅜ inch thick for side and bottom slats. If you do this, a log 14 feet 3 inches long cuts to advantage if you make your crates 14x17 inches and foot-high posts.

Some use common building laths which does quite well with 5 slats on sides and ends, six on bottom.

I prefer elm posts 1 inch square by 12 inches high. Elm holds the nails well and doesn't split so easily in nailing. It makes good slats. So does basswood. Hardwood is too heavy and splits in nailing. Pine isn't bad either. I make crates 14x17x12 inches deep; two bottom end slats 5-8 inch thick to nail bottom slats secure, counter sunk ¼ inch on posts to make outside even; slats ⅜ inch thick by 2¼ wide, opening between top end slats wide enough to admit fingers in lifting. They fit in ordinary wagon box, handy to handle, and hold enough. They are one of the handiest things on a farm.

H.

The fellow who originated the saying that "money makes the mare go" was undoubtedly an advocate of good roads As Prof. Holmes of the N. C Good Roads Association says, the best way that money can make the mare go is to fix the roads so she can travel faster.—Gastonia Gazette.